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PAPER

12/04/2007

ATTORNEY DOCKET NO. CONFIRMATION NO. FIRST NAMED INVENTOR FILING DATE APPLICATION NO. I-2002.011 US 10/521,693 09/12/2005 Ben Adler 12/04/2007 31846 **EXAMINER** INTERVET INC. GANGLE, BRIAN J PATENT DEPARTMENT **PO BOX 318** ART UNIT PAPER NUMBER MILLSBORO, DE 19966-0318 1645 DELIVERY MODE MAIL DATE

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Advisory Action Before the Filing of an Appeal Brief

Application No.	Applicant(s)		
10/521,693	ADLER ET AL.		
Examiner	Art Unit		
Brian J. Gangle	1645		

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The MAILING DATE of this communication appe	ars on the cover sheet with the c	orrespondence add	ress	
THE REPLY FILED 30 October 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.				
1.  The reply was filed after a final rejection, but prior to or on this application, applicant must timely file one of the follow places the application in condition for allowance; (2) a No a Request for Continued Examination (RCE) in compliance time periods:	ving replies: (1) an amendment, aft tice of Appeal (with appeal fee) in (	fidavit, or other evider compliance with 37 C	nce, which FR 41.31; or (3)	
a) The period for reply expires 3 months from the mailing date	of the final rejection.			
b) The period for reply expires on: (1) the mailing date of this A no event, however, will the statutory period for reply expire to Examiner Note: If box 1 is checked, check either box (a) or (	ater than SIX MONTHS from the mailin b). ONLY CHECK BOX (b) WHEN THI	g date of the final rejecti	on.	
TWO MONTHS OF THE FINAL REJECTION. See MPEP 70 Extensions of time may be obtained under 37 CFR 1.136(a). The date have been filed is the date for purposes of determining the period of extunder 37 CFR 1.17(a) is calculated from: (1) the expiration date of the set forth in (b) above, if checked. Any reply received by the Office later may reduce any earned patent term adjustment. See 37 CFR 1.704(b)	on which the petition under 37 CFR 1.1 tension and the corresponding amount thortened statutory period for reply orig than three months after the mailing da	of the fee. The approprinally set in the final Offi	iate extension fee ce action; or (2) as	
NOTICE OF APPEAL		<b>6</b> 1 1 111 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
<ol> <li>The Notice of Appeal was filed on A brief in comp filing the Notice of Appeal (37 CFR 41.37(a)), or any exter a Notice of Appeal has been filed, any reply must be filed AMENDMENTS</li> </ol>	nsion thereof (37 CFR 41.37(e)), to	avoid dismissal of th		
3. ☐ The proposed amendment(s) filed after a final rejection, l	but prior to the date of filing a brief	will not be entered b	ecause	
(a) ☐ They raise new issues that would require further composition (b) ☐ They raise the issue of new matter (see NOTE below) ☐ They are not deemed to place the application in bet	nsideration and/or search (see NO w);	TE below);		
appeal; and/or (d) They present additional claims without canceling a corresponding number of finally rejected claims.				
NOTE: (See 37 CFR 1.116 and 41.33(a)).	21. San attached Nation of Non Co	maliant Amandment	(DTOL 224)	
4. The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  5. Applicant's reply has overcome the following rejection(s):				
<ul> <li>Applicant's reply has overcome the following rejection(s):</li> <li>Newly proposed or amended claim(s) would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).</li> </ul>				
7.  For purposes of appeal, the proposed amendment(s): a) how the new or amended claims would be rejected is provided that the status of the claim(s) is (or will be) as follows:		Il be entered and an e	explanation of	
Claim(s) allowed:				
Claim(s) objected to: Claim(s) rejected: <u>24,29 and 33</u> .				
Claim(s) withdrawn from consideration:				
AFFIDAVIT OR OTHER EVIDENCE				
<ol> <li>The affidavit or other evidence filed after a final action, bu because applicant failed to provide a showing of good and was not earlier presented. See 37 CFR 1.116(e).</li> </ol>				
9.  The affidavit or other evidence filed after the date of filing entered because the affidavit or other evidence failed to o showing a good and sufficient reasons why it is necessary	vercome <u>all</u> rejections under appe and was not earlier presented. S	al and/or appellant fai see 37 CFR 41.33(d)(	ils to provide a 1).	
10. ☐ The affidavit or other evidence is entered. An explanation REQUEST FOR RECONSIDERATION/OTHER	n of the status of the claims after e	ntry is below or attach	ned.	
<ol> <li>The request for reconsideration has been considered bu see attached.</li> </ol>	t does NOT place the application in	n condition for allowa	nce because:	
<ol> <li>Note the attached Information Disclosure Statement(s).</li> <li>Other:</li> </ol>	(PTO/SB/08) Paper No(s)			

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### **ADVISORY ACTION**

Applicant's amendment filed 10/30/2007, under 37 DFR 1.116, in reply to the final rejection, has been considered and is hereby entered.

Claims 24, 29, and 33 are amended. Claims 24, 29, and 33 are pending and are currently under examination.

### Specification

The objection to the specification because of improper use of trademarks is maintained. Although applicant has amended the specification to capitalize trademark names, applicant has not included appropriate generic descriptions (specifically for SPAN and TWEEN). It is suggested that applicant consult the MSDS sheets to determine the appropriate generic descriptions.

**Applicant argues:** that, when reviewed in context, it is clear what each of the trademarked products is. Applicant points to page 21, where SPAN and TWEEN are identified as emulsifiers.

Applicant's arguments have been fully considered and deemed non-persuasive.

There are numerous "emulsifiers," including items such as lecithin, nonoxynol, sodium dodecyl sulfate, polysorbate, and many others. Thus, the term "emulsifier" does not provide a suitable description of either SPAN or TWEEN. Both of these products have generic chemical names. It is these names that are required. As stated previously, it is suggested that applicant consult the MSDS sheets to determine the appropriate generic descriptions.

### Claim Objections Withdrawn

The rejection of claim 24 under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a diagnostic kit for detecting antibodies directed against a 61 kD *Brachyspira hyodysenteriae* lipoprotein having the amino acid sequence of SEQ ID NO:2, comprising an immunogenic 61 kD *Brachyspira hyodysenteriae* lipoprotein having the amino

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acid sequence of SEQ ID NO:2, does not reasonably provide enablement for the claim as recited, is withdrawn in light of applicant's amendment thereto.

# Claim Rejections Maintained 35 USC § 102 and 103

The rejection of claims 24, 29-30, and 33 under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Thomas *et al.* (Infect. Immun., 60:3111-3116, 1992; IDS filed 1/18/2005), is maintained for the reasons set forth in the previous office action.

### Applicant argues:

- 1. That the prior art does not teach an isolated and purified protein having the sequence of SEQ ID NO:2. Applicant asserts that the art does not teach a particular isolated and purified protein, but only bands on gels, "which are multiple proteins."
- 2. That "the skilled practitioner was not enabled to determine that there existed a single protein having this sequence and could not have determined that from the publication cited."

Applicant's arguments have been fully considered and deemed non-persuasive.

Regarding argument 1, the prior art clearly teaches proteins run through a gel electrophoresis separation. The art shows a band containing a lipoprotein of the same size as that claimed by applicant. As stated previously, the sequence of a protein is an inherent characteristic that does not render said protein novel. Applicant has presented no evidence whatsoever that there are multiple 61kd lipoproteins found in *Brachyspira hyodysenteriae* or that the protein shown in the art is different from the claimed protein. Applicant continues to assert that electrophoretic bands contain multiple proteins. This is immaterial to the instant case. The bands shown in the art would contain the claimed protein. Gel electrophoresis is a separation procedure listed in many textbooks as a means of isolating or purifying proteins. The proteins found in these gels have been isolated and purified from other cellular components.

Regarding argument 2, separating proteins by gel electrophoresis is practiced even by undergraduate students; thus, the skilled artisan could easily have produced the claimed protein. Whether or not the sequence of the protein was known is not relevant, since the sequence of a

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protein is an inherent characteristic that does not render said protein novel. However, if the artisan had chosen to sequence said protein, automated sequencing procedures are widely known. It is also widely known in the art that a band cut from a gel after electrophoresis is used in such automated sequencing procedures.

The rejection of claims 24, 29-30, and 33 under 35 U.S.C. 102(b), as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Chatfield *et al.* (Infect. Immun., 56:1070-1075, 1988; IDS filed 1/18/2005), is maintained for the reasons set forth in the previous office action.

### Applicant argues:

- 1. That the prior art does not teach an isolated and purified protein having the sequence of SEQ ID NO:2. Applicant asserts that the art does not teach a particular isolated and purified protein, but only bands on gels, "which are multiple proteins."
- 2. That "the skilled practitioner was not enabled to determine that there existed a single protein having this sequence and could not have determined that from the publication cited."

Applicant's arguments have been fully considered and deemed non-persuasive.

Regarding argument 1, the prior art clearly teaches proteins run through a gel electrophoresis separation. The art shows a band containing a lipoprotein of the same size as that claimed by applicant. As stated previously, the sequence of a protein is an inherent characteristic that does not render said protein novel. Applicant has presented no evidence whatsoever that there are multiple 61kd lipoproteins found in *Brachyspira hyodysenteriae* or that the protein shown in the art is different from the claimed protein. Applicant continues to assert that electrophoretic bands contain multiple proteins. This is immaterial to the instant case. The bands shown in the art would contain the claimed protein. Gel electrophoresis is a separation procedure listed in many textbooks as a means of isolating or purifying proteins. The proteins found in these gels have been isolated and purified from other cellular components.

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The rejection of claims 24, 29-30, and 33 under 35 U.S.C. 102(b), as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Wannemuehler *et al.* (Infect. Immun., 56:3032-3039, 1988; IDS filed 1/18/2005), is maintained for the reasons set forth in the previous office action.

### Applicant argues:

- 1. That the prior art does not teach an isolated and purified protein having the sequence of SEQ ID NO:2. Applicant asserts that the art does not teach a particular isolated and purified protein, but only bands on gels, "which are multiple proteins."
- 2. That "the skilled practitioner was not enabled to determine that there existed a single protein having this sequence and could not have determined that from the publication cited."

Applicant's arguments have been fully considered and deemed non-persuasive.

Regarding argument 1, the prior art clearly teaches proteins run through a gel electrophoresis separation. The art shows a band containing a lipoprotein of the same size as that claimed by applicant. As stated previously, the sequence of a protein is an inherent characteristic that does not render said protein novel. Applicant has presented no evidence whatsoever that there are multiple 61kd lipoproteins found in *Brachyspira hyodysenteriae* or that the protein shown in the art is different from the claimed protein. Applicant continues to assert that electrophoretic bands contain multiple proteins. This is immaterial to the instant case. The bands shown in the art would contain the claimed protein. Gel electrophoresis is a separation procedure listed in many textbooks as a means of isolating or purifying proteins. The proteins found in these gels have been isolated and purified from other cellular components.

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#### Conclusion

No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian J. Gangle whose telephone number is (571) 272-1181. The examiner can normally be reached on M-F 7-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shanon Foley can be reached on (571) 272-0898. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Brian Gangle AU 1645

> ROBERT A. ZEMAN PRIMARY EXAMINER